

Fig. 1(a)

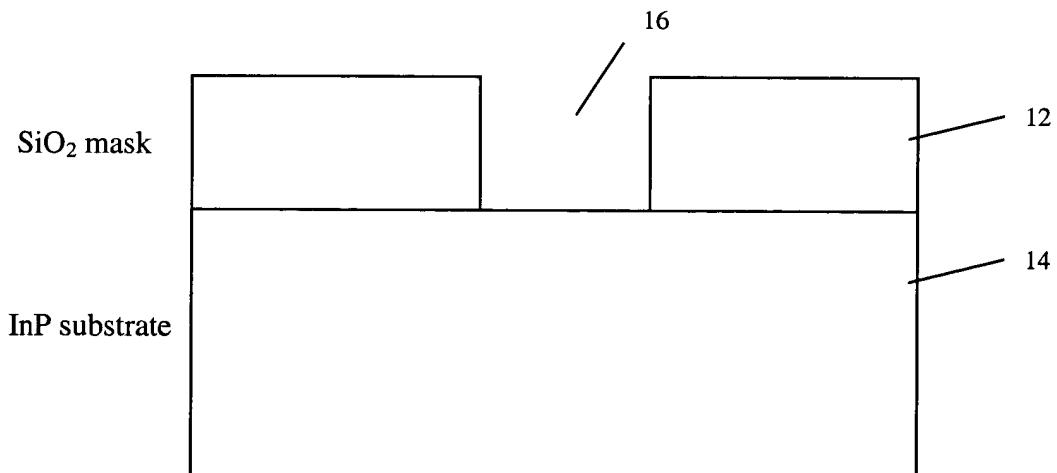


Fig. 1(b)

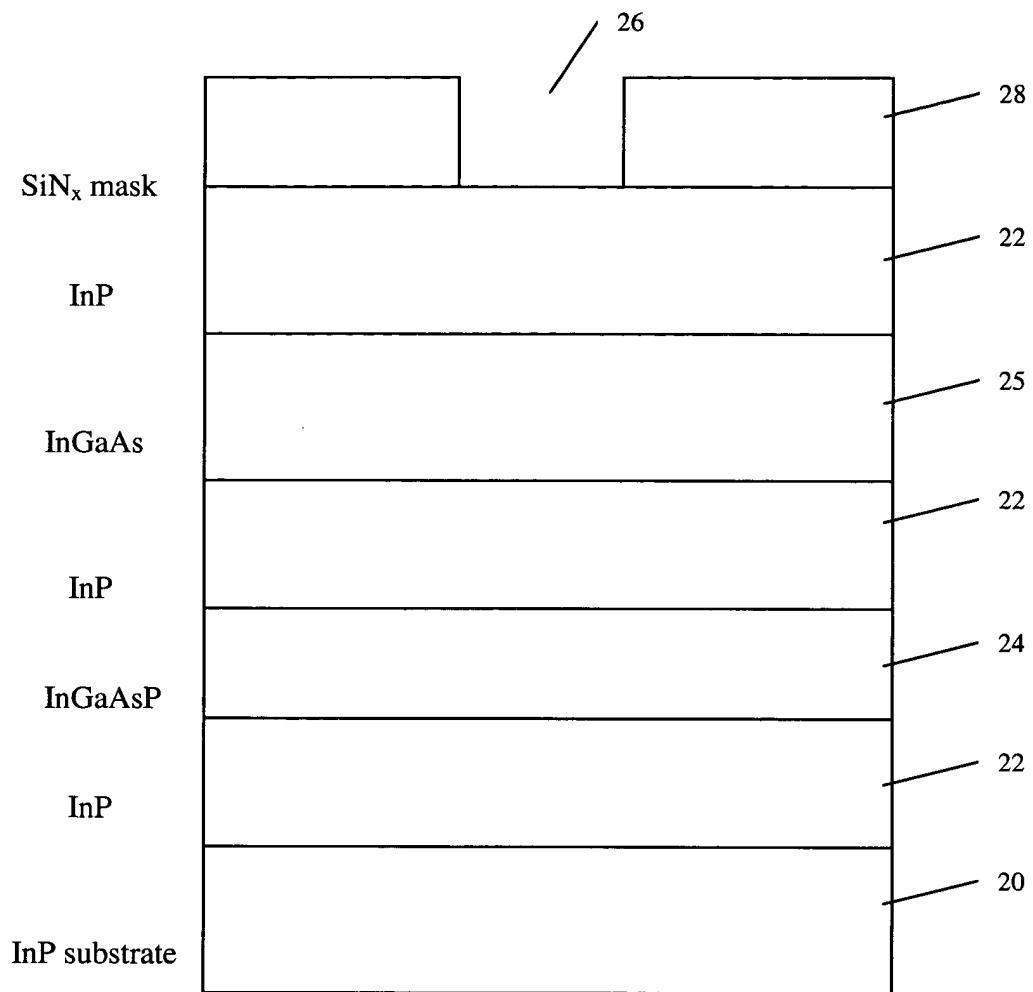


Fig. 1(c)

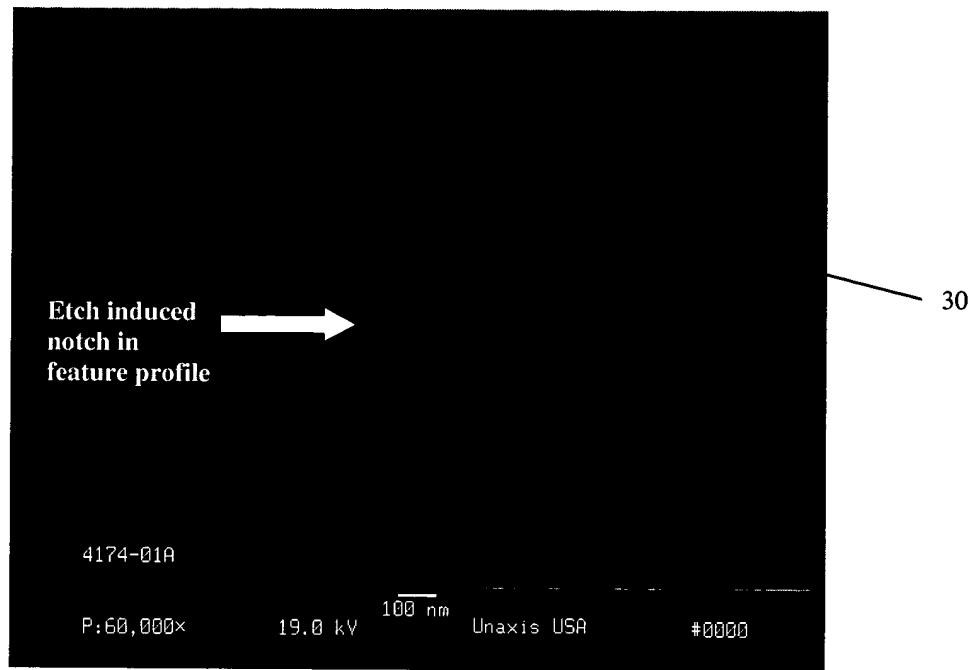


Figure 2. HBr / BCl₃ / CH₄ / Ar etch process. Note notch in feature sidewall due to differing lateral etch rates of different epitaxial layers (structure as shown in Fig. 1a).

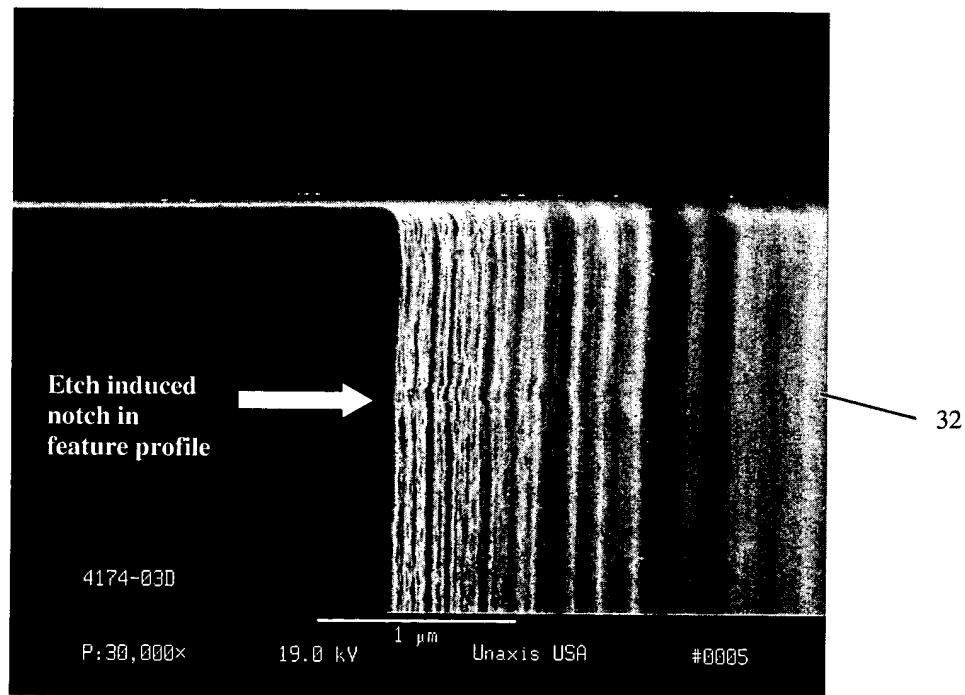


Figure 3. HBr / CH₄ / Ar based process. Notch in feature profile reduced by removing BCl₃ from process but not eliminated (structure as shown in Fig. 1a).

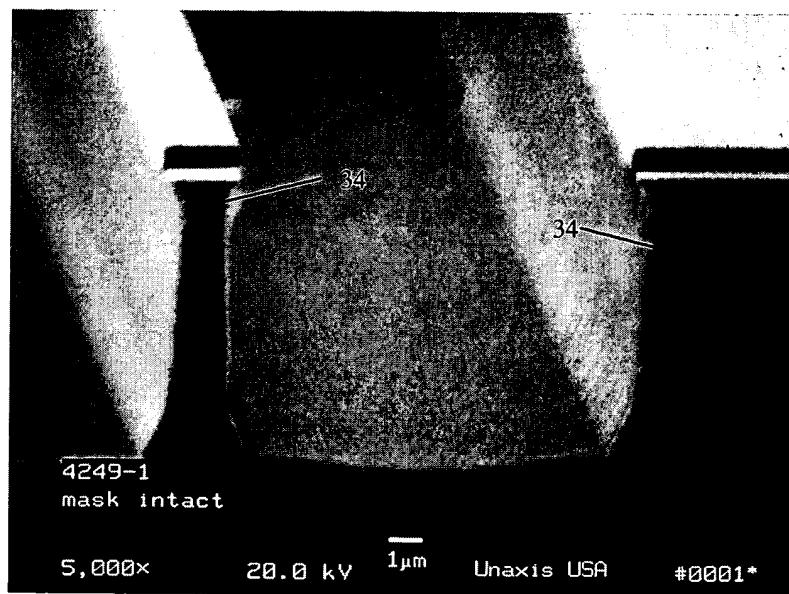


Figure 4. HBr / Ar based process on mechanical InP. Note gross mask undercut . (structure as shown in Fig. 1b).

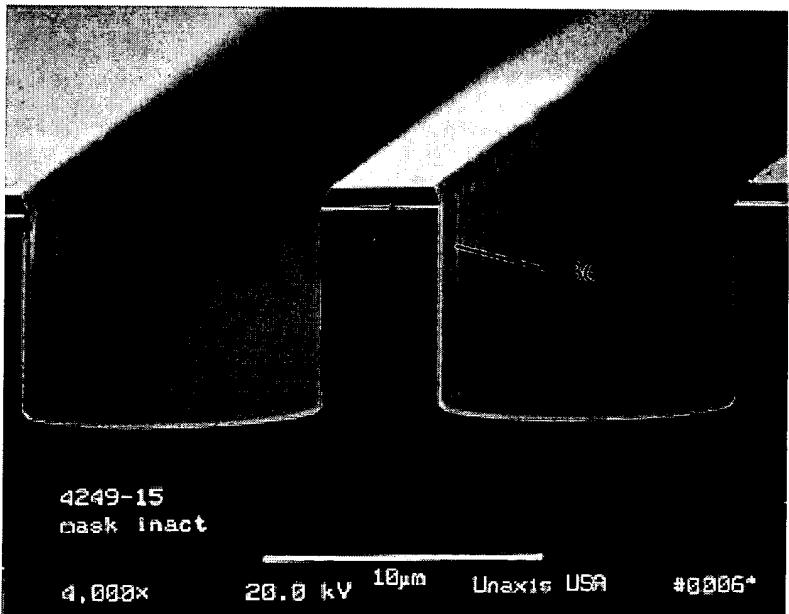


Figure 5. HBr / N₂ process. Smooth vertical feature profiles (bulk InP - structure as shown in Fig. 1b). Note that undercut shown in Figure 3 has been eliminated by addition of N₂.

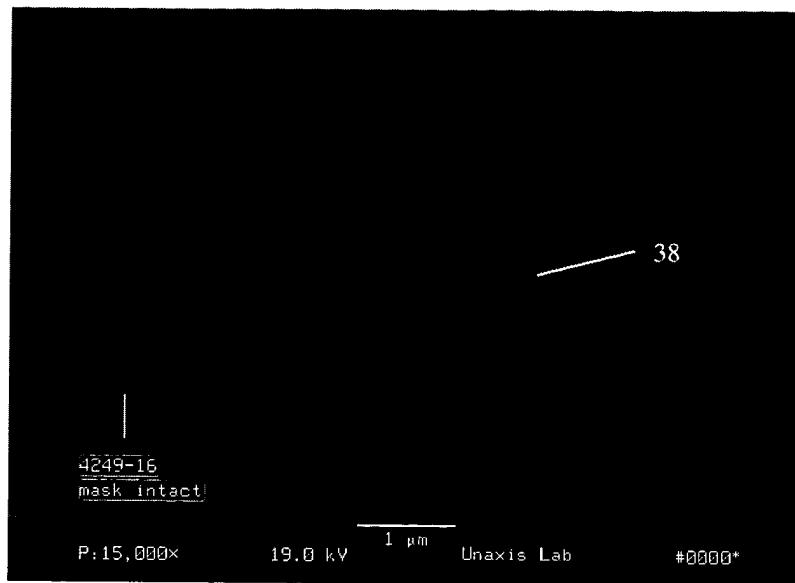


Figure 6. HBr / N₂ process. Smooth vertical feature profiles (structure as shown in Fig. 1c).

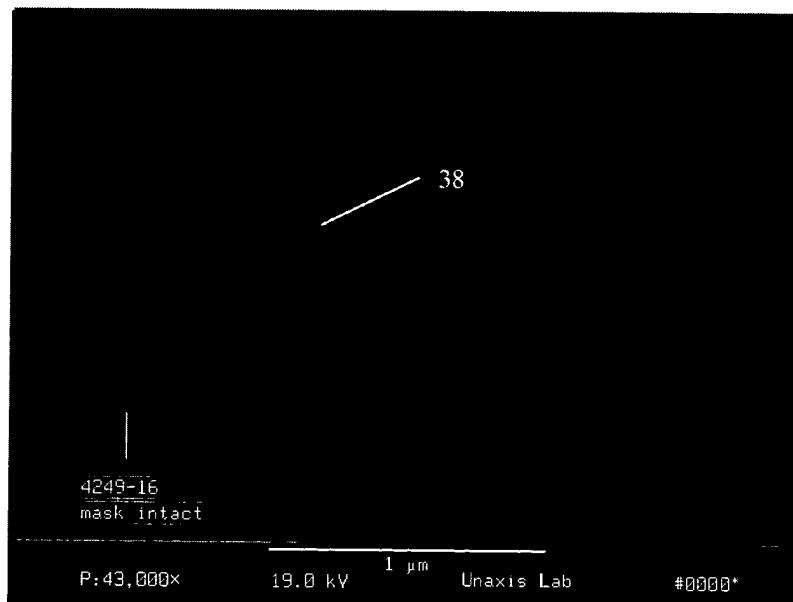


Figure 7. HBr / N₂ process. Cross sectional close up of smooth vertical feature profiles (structure as shown in Fig. 1c).